

ABSTRACT

A resonator, a filter, and a communication apparatus that can be easily miniaturized even if the resonant frequency is relatively low are provided.

Conductor layers 4 and 5 are laminated in the state in which they are partially insulated from each other by a dielectric layer 3. Conductor openings free from any conductor layer in the laminate direction serve as inductive areas IAa and IAb, and the portion where the conductor layers 4 and 5 oppose each other with the dielectric layer 3 therebetween serves as a capacitive area CA. With this configuration, the resulting resonator serves as a stepped-impedance-structured slot resonator. According to this structure, by increasing the impedance step ratio of the capacitive area to the inductive areas, the resonator is miniaturized. Additionally, by suppressing the intrusion of magnetic field energy to the capacitive area, the conductor loss of the resonator is reduced. It is thus possible to obtain a small resonator having high Q_0 .